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| 09/034,415      | 03/04/1998  | PASCAL MICHAUD       | 1798-7267           | 3308             |

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FREDERICK F. CALVETTI  
C/O SMITH, GAMBRELL & RUSSELL  
1850 M. STREET, N.W.  
SUITE 800  
WASHINGTON, DC 20036

| EXAMINER |
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CROSS, LATOYA I

| ART UNIT | PAPER NUMBER |
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1743

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/034,415

Applicant(s)

MICHAUD, PASCAL

Examiner

LaToya I. Cross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office Action is in response to Applicants' amendment dated December 2, 2003.

Claims 1-4, 6-8 and 11-15 are pending.

#### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-4, 6 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,957,672 to Zisman et al.

Zisman et al '672 disclose a surface-active composition for displacing aqueous or organic liquid films from solid surfaces. The surface-active composition contains a fluorinated polyether which provides surface activity to the composition. See col. 4, lines 56-65. The composition may additionally contain fluoroalcohols (fluorinated alcohols) and perfluoroalkane solvents (fluorinated solvents), as recited in claim 1. See col. 7, lines 17-33 of Zisman et al. The fluoroalcohols (fluorinated alcohols) have the formula  $F(CF_3)_m(CH_2)_nCH_2OH$ , where m is 1-10 and n is 1-15, similar to that recited in claim 2. This formula encompasses Applicants' preferred alcohol, tridecafluorooctanol recited in claim 3. The fluoroalcohols are present in an amount of up to 1% (col. 3, lines 10-34 and col. 7, lines 30-33). The perfluoroalkane solvents may include perfluorohexane and are present in an amount of up to 99% by volume, as recited in claims 6. Perfluorohexane is known to have a boiling point of 58-60°C, as recited in claims 4 and 13. The amount of fluorinated polyether (surface active agent) used is from 0.5 to about 1% by weight, as recited in claims 1, 11 and 15 and (col. 4, lines 60-61). At col. 8, line 61 - col. 10,

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line 5, Zisman et al disclose that the solvent composition is applied to a surface to displace liquid films, as recited in claim 12.

Zisman et al differ from the instantly claimed invention in that 1) the exact amount ranges of components are not disclosed and 2) there is no disclosure of the composition not exhibiting a flash point.

With respect to the amounts of components, Zisman et al disclose ranges for the surface active agent and fluorinated solvent that overlap or lie within those claimed by Applicants. Zisman et al disclose 1% fluorinated alcohol, whereas Applicants claim at least 2% fluorinated alcohol (claims 1 and 14). In the case where the claimed ranges overlap or lie inside the ranges disclosed by the prior art, a prima facie case of obviousness exists. Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap, but are close enough that one skilled in the art would have expected them to have the same properties. See MPEP 2114.05, citing *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). In the instant case, Applicants' claimed amount is so close to that of the prior art that one of ordinary skill in the art would expect that the amounts would have similar results. Applicants' have failed to show that 2% fluorinated alcohol performs significantly differently than 1% fluorinated alcohol. In fact, the table in Applicants' specification at page 11, shows 91-95% water removal with 1% fluorinated alcohol and 91-93% water removal with 2% fluorinated alcohol, further showing that there is not a significant difference in using 2% over 1%.

With respect to the flash point of the composition, the composition of Zisman et al comprises similar components as claimed by Applicants. Thus, one of ordinary skill in the art would expect that they would have similar properties including flash point, absent evidence to

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the contrary. The compositions of Zisman et al consist essentially of a surface active agent (fluorinated polyether), fluorinated alcohols and fluorinated solvents. The amounts of the components are similar to those instantly claimed. Thus, one of ordinary skill in the art would expect that the compositions would have similar properties. See MPEP 2112.01.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious within the meaning of 35 USC 103 in view of the teachings of Zisman et al '672.

3. Claims 1-4, 6-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zisman et al '672 in view of US Patent 5,514,301 to Bil et al.

Zisman et al is described above. A different embodiment of Zisman et al consists of the displacement of liquids from solid surfaces for short periods of time. In this embodiment, Zisman et al disclose the use of the fluorinated polyether compound as a solvent in combination with the fluoroalcohol (col. 4, lines 56-65). See col. 4, lines 56-68.

This embodiment differs from the instantly claimed invention in that no surface-active agent is provided.

Bil et al teach compositions for dewetting solid surfaces. The compositions of Bil et al comprise a surface active material prepared by the reaction of alkyl phosphoric acids, fluorinated amine and a quaternary ammonium chloride in solution with a halogenated solvent, as recited in claim 16. Bil et al disclose that in using such surface-active agents, the de-emulsification time can be reduced and in the dewetting process, separation of the aqueous phase and organic phase will be accelerated. See col. 1, lines 26-32 and col. 2, lines 1-8.

Thus, it would have been obvious to one of ordinary skill in the art to use the surface active agent described in Bil et al in the dewetting compositions of Zisman et al in order to

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allow the emulsion formed by the dewetting composition with the extracted water to better separate into two phases allowing the aqueous phase to be removed faster. This will provide a quicker, more efficient removal of water.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious within the meaning of 35 USC 103 in view of the teachings of Zisman et al '672 and Bil et al '301.

***Declaration under 37 CFR 1.132***

4. The declaration under 37 CFR 1.132 filed December 2, 2003 is insufficient to overcome the rejection of claims 1-4, 6-8 and 11-16 based upon Zisman et al (claims 1-4, 6 and 11-15) and Zisman et al in view of Bil et al (claims 1-3, 7, 8 and 11-16) as set forth in the last Office action because: Applicants' declaration compares the removal of water versus the removal of organic liquids using the same composition. This declaration is insufficient because it fails to compare the instant invention to that of the closest prior art (i.e. Zisman et al). In fact, the declaration makes no comparison to any prior art at all. To be sufficient, Applicant must show that the instant invention (using 2% fluoroalcohol) provides unexpected results over Zisman, which teaches 1% fluoroalcohol.

***Response to Arguments***

5. Applicant's arguments filed December 2, 2003 have been fully considered but they are not persuasive. Applicants argue that the instant claims are not obvious over the Zisman et al reference because allegedly the reference fails to teach 2% fluoroalcohol for removing water from surfaces. Applicants state that the reference's teaching of 1% fluoroalcohol is only for

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removing organic liquids, not for aqueous liquids. While the reference does teach that about 1% fluoroalcohol may be used in displacing organic liquids, the reference further states that the amount of solute (fluoroalcohol) may be varied with selection as to the amount being made on the basis of the liquid displacing activity of the particular solutes. Furthermore, claims 1 and 11 of the Zisman et al patent recite displacing liquid films with up to 1% fluoroalcohol. The patent defines liquid films as a layer of an organic liquid or water. Thus, the Examiner is of the position that it would have been obvious to one of ordinary skill in the art to use up to 1% fluoroalcohol in displacing organic liquid, as well as water.

Applicants further argue that the Examiner's statements regarding their Examples are irrelevant in determining whether the claims are obvious over Zisman et al. In response, the reference to Applicants' examples is relevant because the examples clearly show that there is no significant difference in using 2% fluoroalcohol versus 1% fluoroalcohol for water-removal.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 571-272-1256.

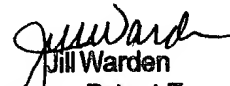
The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LIC

March 16, 2004

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700